

08/08/95

PATENT
Docket No. 5634.261

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventors: John C. Harvey and James W.
Cuddihy

Serial No.: 08/470,571

Filing Date: 6-Jun-95

For: Signal Processing Apparatus and
Methods

Group Art Unit: 2602

Examiner:

Handwritten:
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R.L
10-6-97

Assistant Commissioner for Patents
Washington D.C. 20231

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56(a) and in conformance with the procedures of 37 C.F.R. §§ 1.97-98 and M.P.E.P. § 609, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached Form PTO-1449.

The above-referenced application claims priority under 35 U.S.C. § 120 of the following applications:


<u>Serial No.</u>	<u>Filing Date</u>	<u>Patent No.</u>
08/113,329	August 30, 1993	Pending
08/056,501	May 3, 1993	5,335,277
07/849,226	March 10, 1992	5,233,654
07/588,126	September 25, 1990	5,109,414
07/096,096	September 11, 1987	4,965,825
06/829,531	February 14, 1986	4,704,725
06/317,510	November 3, 1981	4,694,490

Applicants believe that all references cited on the attached Form PTO-1449, as are all references of record in this case, were submitted to the PTO in one or more of the priority applications and/or U.S. Patent Application Serial No. 08/397,582 filed March 2, 1995. Therefore, no copies of the listed references are provided herewith. It is respectfully requested that the information above be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

CERTIFICATION AND/OR FEE

Since this IDS is being filed pursuant to 37 C.F.R. § 1.97(b) before the later of three months after the filing date of the above-referenced application or the date of receipt of the first Office action on the merits, no certification or fee is required.

Respectfully submitted,


Thomas J. Scott, Jr. (Reg. No. 27,836)

Dated: April 1, 1996

HOWREY & SIMON
1299 Pennsylvania Avenue, N.W.
Washington, D.C. 20004-2402
(202) 783-0800 (telephone)
(202) 383-6610 (telecopier)

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS/ SUBCLASS	FILING DATE*
	3,950,618	April 13, 1976	Bloisi	179/2 AS	
	3,958,081	May 18, 1976	Ehrsam et al.	178/22	
	3,975,585	August 17, 1976	Kirk, Jr. et al.	178/5.1	
	3,990,012	November 2, 1976	Karnes	325/308	
	3,996,586	December 7, 1976	Dillon et al.	340/347 DD	
	4,004,085	January 18, 1977	Makino et al.	340/324	
	4,008,369	February 15, 1977	Theurer et al.	358/84	
	4,013,875	March 22, 1977	McGlynn	235/150.2	
	4,015,286	March 29, 1977	Russell	358/13	
	4,019,201	April 19, 1977	Hartung et al.	358/124	
	4,020,419	April 26, 1977	Caspari et al.	325/421	
	4,024,574	May 17, 1977	Nieson	358/117	
	4,024,575	May 17, 1977	Harney et al.	358/118	
	4,027,267	May 31, 1977	Larsen	329/106	
	4,027,331	May 31, 1977	Nicol	358/135	
	4,042,958	August 16, 1977	Saylor et al.	358/141	
	4,044,376	August 23, 1977	Porter	358/84	
	4,045,814	August 30, 1977	Hartung et al.	358/124	
	4,054,911	October 18, 1977	Fletcher et al.	358/141	
	4,064,490	December 20, 1977	Nagel	364/2000	
	4,070,693	January 24, 1978	Shutterly	358/123	
	4,075,660	February 21, 1978	Horowitz	358/124	
	4,079,419	March 14, 1978	Seigle et al.	358/193	
	4,081,754	March 28, 1978	Jackson	325/396	
	4,081,832	March 28, 1978	Sherman	358/124	
	4,086,434	April 25, 1978	Bocchi	79/2 AM	
	4,088,958	May 9, 1978	Suzuki et al.	325/396	
	4,091,417	May 23, 1978	Nieson	358/117	
	4,095,258	June 13, 1978	Sperber	358/120	
	4,096,542	June 20, 1978	Pappas et al.	361/196	
	4,104,681	August 1, 1978	Saylor et al.	358/141	
	4,107,734	August 15, 1978	Percy et al.	358/84	
	4,107,735	August 15, 1978	Frobach	358/84	
	4,112,317	September 5, 1978	Everswick	307/308	
	4,112,383	September 5, 1978	Burgert	329/50	
	4,114,841	September 19, 1978	Muhlfelder et al.	244/166	
	4,120,003	October 10, 1978	Mitchell et al.	358/142	
	4,124,887	November 7, 1978	Johnson et al.	364/107	
	4,126,762	November 21, 1978	Martin et al.	179/2A	
	4,135,213	January 16, 1979	Wintfeld et al.	358/142	
	4,142,156	February 27, 1979	Freund	325/309	
	4,145,717	March 20, 1979	Guif et al.	358/121	
	4,148,066	April 3, 1979	Saylor	358/127	

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS/ SUBCLASS	FILING DATE*
	4,156,253	May 22, 1979	Steudel	358/11	
	4,156,931	May 29, 1979	Adelman et al.	364/900	
	4,163,252	July 31, 1979	Mistry et al.	358/118	
	4,180,709	December 25, 1979	Cosgrove et al.	179/2 AM	
	4,199,656	April 22, 1980	Saylor	178/66.1	
	4,199,781	April 22, 1980	Doumit	358/83	
	4,199,809	April 22, 1980	Pasahow et al.	364/200	
	4,207,524	June 10, 1980	Purchase	375/22	
	4,214,273	July 22, 1980	Brown	358/188	
	4,215,366	November 13, 1984	Davidson	358/124	
	4,216,497	August 5, 1980	Ishman et al.	358/84	
	4,222,068	September 9, 1980	Thompson	358/120	
	4,225,884	September 30, 1980	Block et al.	358/122	
	4,245,246	January 13, 1981	Cheung	358/124	
	4,246,611	January 20, 1981	Davies	358/194	
	4,247,947	January 27, 1981	Miyamoto	455/38	
	4,250,521	February 10, 1981	Wright	358/8	
	4,258,386	March 24, 1981	Cheung	358/84	
	4,266,243	May 5, 1981	Shutterly	358/121	
	4,272,784	June 9, 1981	Saito et al.	358/127	
	4,273,962	June 16, 1981	Wolfe	179/7.1R	
	4,292,650	September 29, 1981	Hendrickson	358/123	
	4,295,155	October 13, 1981	Jarger et al.	358/12	
	4,301,542	November 17, 1981	Weintraub et al.	455/353	
	4,305,101	December 8, 1991	Yarbrough et al.	360/69	
	4,310,854	January 12, 1982	Baer et al.	358/143	
	4,316,217	February 16, 1982	Rifken	358/86	
	4,318,047	March 2, 1982	Dawson	328/112	
	4,323,921	April 6, 1982	Guillou	358/114	
	4,323,922	April 6, 1982	den Toonder et al.	358/117	
	4,329,711	May 11, 1982	Cheung	358/114	
	4,335,426	June 15, 1982	Maxwell et al.	364/200	
	4,340,906	July 20, 1982	den Toonder et al.	358/124	
	4,341,925	July 27, 1982	Doland	178/22.17	
	4,343,042	August 3, 1982	Schrock et al.	455/5	
	4,348,696	September 7, 1982	Beier	358/188	
	4,354,201	October 12, 1982	Sechet et al.	358/122	
	4,355,415	October 19, 1982	George et al.	455/185	
	4,358,672	November 9, 1982	Hyatt et al.	235/380	
	4,360,881	November 23, 1982	Martinson	364/493	
	4,361,848	November 30, 1982	Poignet et al.	358/1	
	4,361,851	November 30, 1982	Asip et al.	358/84	
	4,361,903	November 30, 1982	Ohta	455/2	

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS/ SUBCLASS	FILING DATE*
	4,365,267	December 21, 1982	Tsuda	358/84	
	4,378,470	March 29, 1983	Murto et al.	179/2 C	
	4,382,256	May 5, 1983	Nagata	340/825.44	
	4,385,384	May 24, 1983	Rosbury et al.	371/22	
	4,386,436	May 31, 1983	Kocher et al.	455/151	
	4,388,643	June 14, 1983	Aminetzah	358/123	
	4,388,644	June 14, 1983	Ishman et al.	358/84	
	4,390,898	June 28, 1983	Bond et al.	358/1199	
	4,390,901	June 28, 1983	Keiser et al.	358/147	
	4,392,135	July 5, 1983	Ohyagi	340/825.44	
	4,393,277	July 12, 1983	Besen et al.	179/2 A	
	4,408,345	October 4, 1983	Yashiro et al.	455/3	
	4,411,017	October 18, 1983	Talbot	455/26	
	4,414,621	November 8, 1983	Bown et al.	364/200	
	4,415,771	November 15, 1983	Martinez	179/5R	
	4,418,425	November 29, 1983	Fennel et al	455/27	
	4,424,533	January 3, 1984	Rzeszewski	358/167	
	4,425,578	January 10, 1984	Haselwood et al.	358/84	
	4,425,579	January 10, 1984	Merrell	358/86	
	4,427,968	January 24, 1984	York	340/310	
	4,430,731	February 7, 1984	Gimple et al.	370/30	
	4,434,438	February 28, 1984	Rzeszewski	358/167	
	4,450,481	May 22, 1984	Dickinson	358/114	
	4,450,531	May 22, 1984	Kenyon et al.	364/604	
	4,454,538	June 12, 1984	Toriumi	358/86	
	4,468,701	August 28, 1984	Burcher et al.	358/181	
	4,471,352	September 11, 1984	Soulliard et al.	340/825.44	
	4,475,123	October 2, 1984	Dumbauld et al.	358/114	
	4,476,535	October 9, 1984	Loshing et al.	364/480	
	4,484,218	November 20, 1984	Boland et al.	358/86	
	4,484,328	November 20, 1984	Schlaflly	370/85	
	4,488,179	December 11, 1984	Kruger et al.	358/181	
	4,489,316	December 18, 1984	MacQuivey	340/700	
	4,504,831	March 12, 1985	Jahr et al.	340/870.03	
	4,646,145	February 24, 1987	Percy et al.	358/84	
	4,782,401	November 1, 1988	Faerber et al.	358/335	

* If Pertinent

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY	CLASS/ SUBCLASS	TRANSLATION	
					YES	NO
	0 020 242	December 10, 1980	European	G09G 1/16		X
	1,396,981	June 11, 1975	United kingdom	H04H 1/00	X	
	1,523,307	August 31, 1978	Great Britain	H03K 5/08	X	
	1,543,502	April 4, 1979	United Kingdom	G08B9/00	X	
	1,582,563	January 14, 1981	United Kingdom	G08B9/00	X	
	1,584,111	February 4, 1981	United Kingdom	G08B9/00	X	
	2,051,527	January 14, 1981	Great Britain	G06F 3/153	X	
	2,067,379	July 22, 1981	Great Britain	H04L 1/24	X	
	2,823,175	November 29, 1979	German	G06F 3/12		X
	24 53 441	May 13, 1976	Germany	H04L 9/00		X
	80/02901	December 24, 1980	France	H04N 7/16		X
	857,862	January 4, 1961	United Kingdom	40 (1)	X	
	WO80/00292	February 21, 1980	Japan	H04N9/16		X

OTHER DOCUMENTS

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Hanas et al., "An Addressable Satellite Encryption System For Preventing Signal Piracy", November 1981, pp. 631-635.
	National Cable Television Association Executive Seminar Series, <u>Videotex Services</u> , October 1980, pp. 1-155.
	Kokado et al., "A Programmable TV Receiver", February 1976, pp. 69-82.
	J. Hedger et al., "Telesoftware-Value Added Teletext", August 1980, pp. 555-567.
	Marti, B., "The Concept Of A Universal "Teletext" June 1979, pp.1-11
	Article re: America's Talk-Back Television Experiment: Qube
	Article re: "Teletext-Applications in Electronic Publishing"
	Article re: A Description of the Broadcast Telidon System, IEEE Transactions on Consumer Electronics, Vol. CE - 26, August 1980
	Article re: EPEOS--Automatic Program Recording System by G. Degoulet
	Article re: Teletext signals transmitted in UK...
	Article re: New services offered by a packet data broadcasting system, no. 149 February 1975
	Article re: Philips TV set indicates station tunign and color settings on screen, Electronics, Nov. 27, 1975
	Vincent, A. et al., "Telidon Teletest System Field Trials" IEEE Transactions on Consumer Electronics, Vol. CE - 27, No. 3, Aug. 1981, pp. 530-335
	Rzeszeewski, T., "A New Telletex Channel"
	Kaplinsky, C.H., "The D**(2)B A One Logical Wire Bus for Consumer Applications" 1981
	Sechet, C., "Antiope Teletext Captioning" 1980
	Lambert, O. et al., "Antiope and D.R.C.S." 1980
	"LSI Circuits for Teletext and Viewdata -- The Lucy Generation" published by Mullard Limited, Mullard House (1981)
	Nicholas Negroponte in SID 80 Digest titled, "17.4/10:25 a.m.: Soft Fonts", pp. 184-185
	IEEE Consumer Electronics July 1979 issue from Spring Conference titled, "Consumer Text Display Systems", pp. 235-429
	Videotext '81 published by Online Conferences Ltd., for the May 20-22, 1981 Confernece, pp. 1-470
	"Teletext and Viewdata Costs as Applied to the U.S. Market" Published by Mullard House (1979), pp. 1-8
	Dalton, C.J., "International Broadcasting Convention" (1968), Sponsors: E.E.A., I.E.E., I.E.E.E., I.E.R.E., etc.
	Shorter, D.E.L., "The Distribution of Television Sound by Pulse-Code Modulation Signals Incorporated in the Video Waveform"
	Chorky, J.M., Shorter, D.E.L., "International Broadcasting Convention" (1970), pp. 166-169
	"The Implementation of the Sound-in-Sync project for Eurovision (Feb. 1975), pp. 18-22, No. 140 E.B.U. Review
	Maegele, Manfred, "Digital Transmissions of Two Television Sound Channels in Horizontal Banking", pp. 68-70
	Weston, J.D., "Digital TV Transmission for the European Communications Satellite" (1974), pp. 318-325
	Golding, L., "A 15 to 25 Mhz Digital Television System for Transmission of Commercial Color Television" (1967), pp. 1-26

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Huth, Gaylord K., "Digital Television System Design Study: Final Report (11/28/76), prepared for NASA Lyndon B. Johnson Space Center
	Weston, J.D., "Transmission of Television by Pulse Code modulation", Electrical Communication (1967), pp. 165-172
	Golding, L., "F1-Ditec-A-Digital Television Communications System for Satellite Links," Telecommunications Numeriques Par Satellite
	Haberle, H. et al., "Digital TV Transmission via Satellite", Electrical Communications (1974)
	Dirks, H. et al., "TV-PCM6 Integrated Sound and Vision Transmission System, Electrical Communication (1977), pp. 61-67
	Talygin, N.V. et al., The "Orbita" Ground Station for Receiving Television Programs Relayed by Satellites, Elektrovinz, pp. 3-5
	Voorman, J.O. et al., A one-chip Automatic Equalizer for Echo Reduction in Teletext, IEEE Transactions on Consumer Electronics, pp. 512-529
	MacKenzie, G.A., A Model for the UK Teletext Level 2 Specification (Ref: GTV2 242 Annex 6" based on the ISO Layer model
	Chambers, J.P., A Domestic Television Program Delivery Services, British Broadcasting Corporation, pp. 1-5
	McKenzie, G.A., UK Teletext - The Engineering Choices, Independent Broadcasting Authority, pp. 1-8
	Adding a new dimension to British television, Electronic Engineering (1974)
	Jones, Keith, The Development of Teletext, pp. 1-6
	Ando, Heichero et al., Still-Picture Broadcasting - A new Informational and Instructional Broadcasting System, IEEE Transactions on Broadcasting (1973), pp. 68-76
	B.B.C.I.B.A., Specification of Standards for information transmission by digitally coded signals in the field - blanking interval of 625-line systems (1974), pp. 5-40
	Tarrant, D.R., "Teletext for the World" (date unknown)
	Clifford, Colin et al., "Microprocessor Based, Software Defined Television Controller", IEEE Transaction on Consumer Electronics (1978), pp. 436-441
	Hughes, William L. et al., "Some Design Considerations for Home Interactive Terminals", IEEE Transactions on Broadcasting (1971)
	Mothersdale, Peter L., "Teletext and viewdata: new information systems using the domestic television receiver", Electronics Record (1979), pp. 1349-1354
	Betts, W.R., "Viewdata: the evolution of home and business terminals", PROC.IEE (1979), pp. 1362-1366
	Hutt, P.R., "Thical and practical ruggedness of UK teletext transmission", PROC.IEE (1979), pp. 1397-1403
	Rogers, B.J., "Methods of measurement on teletext receivers and decoders", PROC.IEE (1979), pp.1404-1407
	Green, N., "Subtitling using teletext service - technical and editorial aspects", PROC.IEE (1979), pp. 1408-1416
	Chambers, M.A., "Teletext - enhancing the basic system", PROC.IEE (1979), pp. 1425-1428
	Crowther, G.O., "Adaptation of UK Teletex System for 525/60 Operation", IEEE Transactions on Consumer Electronics (1980), pp. 587-596
	BBC, BBC Microcomputer: BBC Microcomputer with Added Processor and Teletex Adaptor (Manual)
	Green, N.W., "Picture Oracle," On Independent Television Companies Association Limited Letterhead

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	National Captioning Institute, Comments on the Matter of Amendment of Part 73, Subpart E. of the Federal Communications Rules Government Television Stations to Authorize Teletext (before F.C.C.) 03-26-81
	Balchin, C., "Videotext and the U.S.A.", I.C. Product Marketing Memo
	EIA Teletext SubCommittee Meetings, Report on USA Visit
	Brighton's Experience with Software for Broadcast (Draft) 1981
	AT&T, "Videotex Standard Presentation Level Protocol", 1981
	IBA Technical Review of Digital Television by F. Howard Steele, pp. 1-64, 6/1973
	National Cable Television Association report, "Videotex Services" given at Executive Seminar, pp. iii-155
	Electronic Industries Association - Teletext Subcommittee Task Group A - Systems Minutes of Meeting 3/30/81 at Zenith plus attachments
	Electronic Industries Association - Teletext Subcommittee Task Group A - Systems Interim Report, 3/30/81 by Stuart Lipoff, Arthur D. Little Inc.
	Minutes of Electronic Industries Association Teletext Subcommittee Task Force B - Laboratory & Field Tests 3/30/81
	National Captioning Institute Report, "The 1980 Closed-Captioned Television Audience"
	Electronic Industries Assoc. - Teletext Subcommittee - Steering Committee Minutes of Meeting on 3/31/81
	National Cable Television Association report, "Videotex Services" October 1980
	Scala Info Channel Advertisement, "The Art of Conveying A Message"
	Zenith Corporation's Z-Tac Systems information includes Z-tac specifications, access list, etc. (various articles)
	Report by Cablesystems Engineering Ltd. on, "Zenith Addressable System and Operating Procedures" and Advertising documents, Nov. 1981
	Notations by Walt Ciciora dated 8/19/81 referring to Virtext figures, 8/19/81
	"Preliminary Specification for Basic Text" Stamped Zenith Confidential, 2/17/81
	Petition to FCC dated 3/26/81 titled, "Petition for Rulemaking of Unighted Kingdom Teletext Industry Goup," also 1 page of handwritten notes from Walter Ciciora
	"Enhanced Computer Controlled Teletext for 525 Line Systems (Usecc) SAA 5245 User Manual" report by J.R. Kinghorn, August 1, 1981
	"Questions and Answers about Pay TV" by Ira Kamen, 1973
	Oak Industries 1981 Annual Report
	Article, "50 Different Uses For At Home 2-Way Cable TV Systems" by Morton Dubin
	Derwent Info Ltd. search. Integrated broadcasting & Computer Processing system. Inventor J. Harvey/J. Cuddihy
	"Relevant papers for Weather Channel V PMMC"
	Letter to Peter Hatt Re: BVT: Advisory UK Industry Contact Group, 6/24/81
	Memo RE: Next Moves by British teletext and video proponents toward gaining support of systems in US.
	Memo - Re: British Teletext -- ABC
	Notes to Section 22.4: Simple Block Encipherment Algorithm
	Internal Correspondence to John Meyer from Mike Clader RE: Teletext Business Posture, Sept. 18, 1981 and Internal Correspondence to Mike Calder from John Nemec RE: Trips to Zenith, Sept. 9, 1981
	Kahn, et al., "Advances in Packet Radio Technology," Proceedings of the IEEE, Vol. 66, No. 11, Nov. (1978) pp. 1468-1495

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Clifford, C., "A Universal Controller for Text Display Systems," IEEE Transactions on Consumer Electronics, (1979) pp. 424-429
	Harden, B., "Teletext/Viewdata LSI," IEEE Transactions on Consumer Electronics, (1979), pp. 353-358
	Bown, H. et al., "Comparative Terminal Realizations with Alpha-Geometric Coding," IEEE Transaction on Consumer Electronics, (1980), pp. 605-614
	Crowther, "Dynamically Redefinable Character Sets--D.R.C.S.," IEEE Transaction on Consumer Electronics, (1980), pp. 707-716
	Chambers, John et al., "The Development of a Coding Hierarchy for Enhanced UK Teletext," IEEE Transaction on Consumer Electronics, (1981), pp. 536-540
	In Re Reexamination of U.S. Patent No. 4,706,121
	U.S. Patent Application by T. Diepholz (Serial No. 266900), filing date 5-26-81
	88908836.5 International Application to John C. Harvey
	Kruger, H. E., "Memory Television, The ZPS Digital Identification System." pp. 1 - 9

EXAMINER	DATE CONSIDERED
EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).	